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CENTRAL FAX CENTER
AUG 25 2004

26 August 2004

Atty. Docket No. 003-060

In re application of: Alexander BEECK et al.
Application No.: **10/611,944**
Filing Date: 3 July 2003
Title: Gap Seal for Sealing a Gap Between Two Adjacent Components

Mail Stop Amendment

Commissioner for Patents

P.O. Box 1450

Alexandria, Virginia 22313-1450

☒ Via Facsimile to: 703.872.9306

Sir:

Transmitted herewith is a(n) Response in the above-identified application.

- ☐ Small entity status of this application under 37 C.F.R. §§ 1.9 and 1.27 has been established by a verified statement previously submitted or a claim previously made.
- ☐ Small entity status under 37 C.F.R. §§ 1.9 and 1.27 is claimed.
- ☒ No additional fee is required, as calculated below.
- ☐ A fee is required, as calculated below:

	(Col. 1)		(Col. 2)	(Col. 3)	SMALL ENTITY		or	LARGE ENTITY	
	<i>Claims Remaining After Amendment</i>		<i>Highest No. Previously Paid For</i>	<i>Extra</i>	<i>Rate</i>	<i>Fee</i>		<i>Rate</i>	<i>Fee</i>
Total	10	minus	20	0	x \$9 =	\$	or	x \$18 =	\$0.00
Indep.	1	minus	3	0	x \$43 =	\$	or	x \$86 =	\$0.00
<input type="checkbox"/> First Presentation of Multiple Dependent Claims					+ \$145 =	\$	or	+ \$290 =	\$
					Total	\$	or	Total	\$0.00

- ☐ Please charge Deposit Account No. 50-2821 in the amount of \$_____.
- ☐ A check in the amount of \$_____ is enclosed, including to cover any extension of time fee.
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- ☒ The U.S. Patent and Trademark Office is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to
- ☒ Deposit Account No. 50-2821
- ☐ the credit account identified in PTO-2038.
- ☒ Any filing fees under 37 C.F.R. § 1.16 for the presentation of extra claims.
- ☒ Any patent application processing fees under 37 C.F.R. § 1.17.

Customer Number 36844

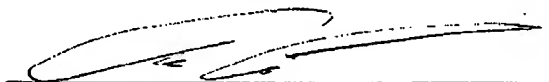
Cermak & Kenealy LLP

P.O. Box 7518

Alexandria, VA 22307-7518

703.768.0994 (v+f)

Respectfully submitted,



Adam J. Cermak

Reg. No. 40391

**RECEIVED
CENTRAL FAX CENTER****AUG 25 2004****IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Alexander BEECK et al.

Application No.: 10/611,944

Filing Date: 3 July 2003

For: Gap Seal for Sealing a Gap Between Two
Adjacent Components

Art Unit: 3676

Examiner: Patel, Vishal A.

Attorney Ref. No.: 003-060

Via Fax: 703.872.9306**RESPONSE UNDER 37 C.F.R. § 1.111****Mail Stop AMENDMENT**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated 26 April 2004, which set a three-month shortened statutory period of response thereto, please amend the above-captioned patent application as follows. A Petition for a one-month extension of time under 37 C.F.R. § 1.136(a), and the fee specified in 37 C.F.R. § 1.17(a), is filed concurrently herewith.

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the following remarks.

Rejection under 35 U.S.C. § 102

In the Office Action, beginning at page 2, Claims 1-10 were rejected under 35 U.S.C. § 102(b), as reciting subject matters that allegedly are anticipated by U.S. Patent No. 4,854,600, issued to Halling et al. ("Halling"). Applicant respectfully requests reconsideration of this rejection.

The present application describes exemplary sealing bodies in accordance with the principles of the present invention. As illustrated in the drawing figures, a sealing body 7 according to the present invention is provided with a support zone 11, which is formed between contact zones 8. Furthermore, the sealing body 7 is supported by this support zone 11 on a step 10 provided at one of the components 1 or 2.

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One aspect of the present invention includes that the positioning of the supporting zone between the contact zone can be important to ensure the sealing effect of the gap seal in case of a relative movement of the components parallel to the surface of the step, *i.e.*, vertically to the sealing surfaces of the components.

Claim 1, the sole independent claim, recites a combination of elements including, *inter alia*, two components separated by a gap, each component including a sealing surface, the two sealing surfaces facing each other, one of the two components comprising a step that projects from one component sealing surface toward the other component sealing surface, and a sealing body comprising a band having a cross-section bent in such a way to form two contact zones which abut with a preload against the two sealing surfaces of the components and deflect resiliently when the distance between the sealing surfaces is changed, and a support zone formed between the contact zones supported vertically relative to the direction of resilient movement on said step. The prior art of record, including *Halling*, fails to identically disclose or describe a combinations of elements as recited in the combination of Claim 1.

Halling describes several embodiments of pressure seal rings. With reference to the embodiments shown in the various drawings of *Halling et al*:

Fig. 1: The facing sealing surfaces have references 44 and 48. Accordingly, the contact zones abutting these sealing surfaces 44, 48 would have references 40 and 34. Between these contact zones 40, 34 there is no supporting zone supported on any step. The zones 20 and 22 are separated from the steps 42 and 46. Zone 36 is not between the contact zones 40 and 34.

Fig. 3: The facing sealing surfaces have references 104 and 98. Accordingly, the contact zones abutting these sealing surfaces 104, 98 would have references 88 and 92. Between these contact zones 88, 92 there is no supporting zone supported on any step. The zones 84, 82, 80, 78, 76 are separated from the step 96 and the zones 83, 81, 79, 77 are separated from the step 102.

Fig. 8: The facing sealing surfaces have references 166 and 168. The contact zones are not labeled. Between these contact zones there is no supporting zone supported on any step. The right-hand zone 160 isn't facing any step. The left-hand zone (not numbered) is separated from step 178. Zone 176 isn't located between the contact zones.

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Fig. 9: The facing sealing surfaces have references 194 and 200. Accordingly, the contact zones abutting these sealing surfaces 194, 200 would have references 192 and 198. Between these contact zones 192, 198 there is no supporting zone supported on any step. The right-hand zone 180 is separated from the facing step (not numbered). The left-hand zone (not numbered) is also separated from the facing step (not numbered). An end-zone near the contact zone 198 is not between the contact zones 192 and 198.

Fig. 10: The facing sealing surfaces have references 42 and 46. Accordingly, the contact zones abutting these sealing surfaces 44, 46 would have references 40' and 34'. Between these contact zones 40', 34' there is no supporting zone supported on any step. The zones 20' and 22' are separated from the steps 44 and 48. Zone 36' is not between the contact zones 40' and 34'.

Among numerous advantages of the present invention, a supporting zone 11 arranged between the two contact zones 8 means there is little or no momentum affecting the sealing body 7; this momentum is a result of the pressure difference between the two spaces connected by the gap 3. If the support zone is arranged eccentrically, as in *Halling*, the momentum may be very large and may result in abrasive effects between the support zone and the step. Furthermore, the momentum may provoke a rolling movement of the sealing body that may interfere with the sealing effect of the gap seal.

For at least the foregoing reasons, Applicant respectfully submits that the subject matters of Claims 1-10 are not anticipated by *Halling*, are therefore not unpatentable under 35 U.S.C. § 102(b), and therefore respectfully requests withdrawal of the rejection thereof under 35 U.S.C. § 102.

Conclusion

Applicant respectfully submits that the present patent application is in condition for allowance. An early indication of the allowability of this patent application is therefore respectfully solicited.

If the patent examiner believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, they are invited to call on the number below.

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It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit all refunds and overpayments, to my Deposit Account 50-2821.

Respectfully submitted,

By: 

Adam J. Cermak
Registration No. 40,391

U.S. P.T.O. Customer Number 36844
Cermak & Kenealy LLP
P.O. Box 7518
Alexandria, Virginia 22307

703.768.0994

Date: 26 August 2004

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